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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,973	03/23/2004	Jeno Muthiah	1150-20-CP	2321

7590

07/03/2006

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EXAMINER

FIGUEROA, JOHN J

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,973	<b>Applicant(s)</b> MUTHIAH, JENO	
	<b>Examiner</b> John J. Figueroa	<b>Art Unit</b> 1712	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.  
     4a) Of the above claim(s) 1-9, 20-22 and 25-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-19, 23 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. <u>20060626</u> .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/23/04</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-6, drawn to a coating powder, comprising an acrylic resin and an isocyanurate, and a powder coated article comprising thereof, classified in class 428, subclass 423.1.
  - II. Claims 7-9, drawn to a process for coating a substrate, the coating comprising an acrylic resin and an isocyanurate, classified in class 427, subclass 407.1+.
  - III. Claims 10-19, 23 and 24, drawn to a coating powder, comprising an acrylic resin and a polyester, and a powder coated article comprising thereof, classified in class 428, subclass 480.
  - IV. Claims 20-22, drawn to a process for coating a substrate, the coating comprising an acrylic resin and a polyester, classified in class 427, subclass 412.5.
  - V. Claims 25-32 and 36 are drawn to a coating powder comprising an acrylic resin and a powder coated article comprising thereof, classified in class 428, subclass 500+.
  - VI. Claims 33-35, drawn to a process for coating a substrate, the coating comprising an acrylic resin, classified in class 427, subclass 412.3.

The inventions are distinct, each from the other because of the following reasons:

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2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the coating composition can be used in a direct manual coating application process not involving electrodeposition.

3. Inventions III and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the coating composition can be used in a direct manual coating application process not involving electrodeposition.

4. Inventions V and VI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the coating composition can be used in a direct manual coating application process not involving electrodeposition.

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5. Inventions I, III and V are directed to related products. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, the coating composition of Group I comprises an isocyanurate, the coating composition of Group III comprise a polyester, whereas the coating composition of Group V comprises acrylic resin. These compositions are patentably distinct, require a different search and are mutually exclusive.

6. Inventions II, IV and VI are directed to related process of use. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, the process of use of Group II involves coating with a composition comprising an isocyanurate and an acrylic resin, the process of Group IV involves coating with a composition comprising a polyester, whereas the coating composition of Group VI comprises coating with a composition comprising acrylic resin. These processes recite coating with patentably distinct compositions and, thus, require a distinct search for each particular process.

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7. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

8. During a telephone conversation with Mr. Gerald K. White on June 9, 2006 a provisional election was made with traverse to prosecute the invention of Group III, claims 10-19, 23 and 24. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-9, 20-222 and 35-36 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 10-12 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent Number (USPN) 6,294,610 B1 to Daly et al. (hereinafter 'Daly').

Daly discloses a curing coating powder for a heat-sensitive substrate comprising an epoxy resin and a carboxylic acid functional polyester and/or acrylic resin; wherein the combined epoxy functionality of the polymer is at least 5, the acid number of the carboxylic acid functional polymer is between 25 and about 75, the epoxy equivalent

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weight of the epoxy resin is between 200 and 1000 and wherein the combined high functionality of the epoxy resin and carboxylic acid functional polymer contributes to rapid cross-linking and curing. (Col. 2, line 48 to col. 3, line 8)

Daly discloses that an epoxy resin that cross-links with carboxylic acid functional polyesters can be triglycidyl isocyanurate and that the curing catalyst for the coating compound can be a phosphonium, ammonium or imidazole compound. (Col. 2, lines 25-42; col. 3, lines 8-40)

Daly further discloses that the polyester resins are relatively short chain having acid numbers of about 15 to 200, preferably between 25 and 90, whereas the acrylic polymer also has high acid numbers between 15 and 200. (Col. 3, lines 48-60; col. 4, lines 25-53)

Daly further discloses that the epoxy compound may be an epoxy-functional acrylic resin, such as glycidyl methacrylate copolymer (Col. 5, lines 42-54), and that the coating can be applicable to conventional substrates, such as metal, steel or aluminum (Col. 6, lines 46-64) In Example 2, Daly discloses the powder comprising about a 2:1 ratio of polyester resin to epoxy/acrylic resin (Col. 7).

Thus, the claims are anticipated by Daly.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 13, 14, 18, 19, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daley.

Daley was discussed previously above in paragraph #10. Daley does not explicitly disclose a coating powder formed by using more than one crosslinking agent.

However, Daley does teach that the coating composition may contain more than one species of the various components of the composition, such as a mixture of polyesters (col. 3, lines 55-60) or a mixture of acrylic resins (col. 4, lines 44-45).

Thus, it would have been obvious to one skilled in the art to include in Daley's coating powder composition a mixture of epoxy crosslinking agents selected from the list of epoxies provided by Daley on col. 5, lines 17-41. Moreover, Applicant has not provided any reason for the criticality of the composition having two crosslinking agents.

Therefore, the claims are unpatentable over Daley.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. The examiner can normally be reached on Mon-Thurs & alt. Fri 8:00-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone




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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJF/RAG

  
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PRIMARY EXAMINER  
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